

Serial No.: 10/762,582 Group Art Unit: 1646

Filed: January 23, 2004 Examiner: Unknown

For: HYDROPHILIC, THIOL-REACTIVE CYANINE DYES AND CONJUGATES THEREOF

WITH BIOMOLECULES FOR FLUORESCENCE DIAGNOSIS

## INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This information disclosure statement is made in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98 as follows:

## Timing and Fees

| X |   |  | F.R. § 1.97(b), no fee or statement is required for filing this information tement is filed:  |  |  |
|---|---|--|---|--|--|
|   |   |  | three months of the filing date of a national application other than a CPA § 1.53(d);   |  |  |
|   | within three months of the actual filing date of the national phase application; OR |  |   |  |  |
|   | $\boxtimes$   | before the mailing of a first substantive office action (including after f RCE). |   |  |  |
|   |   |  | .R. § 1.97(c), this information disclosure statement is filed after the periods 7 C.F.R. § 1.97(b), but before the mailing date of: |  |  |
|   |   |  | a final rejection under 37 C.F.R. 1.113;  |  |  |
|   |   |  | termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2); OR   |  |  |
|   |   |  | a notice of allowance under 37 C.F.R. § 1.311; and  |  |  |

|         |         | is accompanied by: |  |  |  |  |  |
|---------|---------|--------------------|--|--|--|--|--|
|         |         |                    | the statement as specified in 37 C.F.R. § 1.97(e) set out below; OR  |  |  |  |  |
|         |         |                    | a check covering the fee of \$180.00 under 37 C.F.R. § 1.17(p).  |  |  |  |  |
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|         |         |                    | a final action under 37 C.F.R. § 1.113;  |  |  |  |  |
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| Statem  | nents U | nder 37            | C.F.R. 1.97(e)   |  |  |  |  |
|         |         |                    | Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application having a mailing date not more than three months prior to the filing date of this information disclosure statement; or  |  |  |  |  |
|         |         |                    | No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned attorney after making reasonable inquiry, no item of information contained in this information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing date of the information disclosure statement. |  |  |  |  |
| Cited 1 | Materia | <u>ls</u>          |  |  |  |  |  |
|         |         | ancest             | of materials listed but not attached were cited in benefit (35 U.S.C. § 120) or application Serial No, on Form 892 by the Examiner and/or Form by the applicant; see 37 C.F.R. § 1.98(d).  |  |  |  |  |
|         |         | -                  | s of materials listed but not attached were cited in an international search dated   |  |  |  |  |

|       | $\boxtimes$ | Copies of the materials listed are attached (except for the foregoing).  |
|-------|-------------|--|
| Non-l | English 1   | Language References  |
|       |             | An English-language search report or equivalent paper from a foreign patent office is provided indicating the relevance of the cited reference(s).                           |
|       |             | A foreign-language search report from a foreign patent office is provided, and pertinent parts are translated substantively below:   |
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|       |             | invention  |
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Respectfully submitted,

Anthony J. Zelano, Reg. No. 27,969

Attorney for Applicants

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Attorney Docket No.: BOEHMER-0001

Date: 1 October 2004

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PTO/SB/08A (08-00)

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|------------|----------------------|--------|------------|------------------------|-------------------|--|
|            |                      |        |            | Application Number     | 10/762,582        |  |
| INFO       | RMATION              | DIS    | CLOSURE    | Filing Date            | January 23, 2004  |  |
| STA        | TEMENT B'            | Y AF   | PPLICANT   | First Named Inventor   | Kia LICHA et al.  |  |
|            |                      |        |            | Group Art Unit         | 1646              |  |
|            | (use as many she     | ets as | necessary) | Examiner Name          | Unknown           |  |
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|                     |           |                   | U.S. F                                      | ATENT DOCUMENTS                                 |   |
|---------------------|-----------|-------------------|---|---|---|
| Examiner Initials * | Cite No.1 | U.S. Patent Docum | ent<br>Kind Code <sup>2</sup><br>(if known) | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document  MM-DD-YYYY |
|                     | 1         | 2002/0077487      |   | Wai-Yee LEUNG et al.                            | 06-20-2002  |
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| FOREIGN PATENT DOCUMENTS |           |                         |                     |   |  |                              |  |    |
|--------------------------|-----------|-------------------------|---------------------|---|--|------------------------------|--|----|
|                          |           | Foreign Patent Document |                     |   |  | Date of Publication of       | Pages, Columns, Lines,<br>Where Relevant |    |
| Examiner<br>Initials*    | Cite No.1 | Office <sup>3</sup>     | Number <sup>4</sup> | Kind Code <sup>5</sup><br>( <i>if known</i> ) | Name of Patentee or Applicant of<br>Cited Document | Cited Document<br>MM-DD-YYYY | Passages or Relevant<br>Figures Appear   | т⁴ |
|                          | 2         | wo                      | 00/16810            |   | Naoto MIWA et al.                                  | 03-30-2000                   |  |    |
|                          |           |                         |                     |   |  |                              |  |    |
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Substitute for form 1449A/PTO Complete if Known **Application Number** 10/762,582 INFORMATION DISCLOSURE Filing Date January 23, 2004 STATEMENT BY APPLICANT First Named Inventor Kia LICHA et al. Group Art Unit 1646 (use as many sheets as necessary) **Examiner Name** Unknown Sheet of Attorney Docket Number BOEHMER-0001

|                        |           | NON PATENT LITERATURE DOCUMENTS   |    |
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| Examiner<br>Initials * | Cite No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T² |
|                        | 3         | ATIF ZAHEER ET AL., "IRDye 78 Conjugates for Near-Infrared Fluorescence Imaging," Molecular Imaging, October 2002, pages 354-364, vol. 1, No. 4, XP008029547.   |    |
|                        | 4         | ATIF ZAHEER ET AL., "In Vivo near-infrared fluorescence imaging of osteoblastic activity," Nature Biotechnology, December 2001, pages 1148-1154, vol. 19, XP001080134.  |    |
|                        |           | JAMES H. FLANAGAN ET AL., "Functionalized Tricarbocyanine Dyes as Near-Infrared Fluorescent Probes for Biomolecules," Bioconjugate Chemistry, 1997, pages 751-756, XP002272364.   |    |
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